

WHAT IS CLAIMED IS:

1. A method of transferring a transfer element of a donor sheet to a receptor,
the method comprising:
5 forming an organic charge transfer layer on a receptor substrate;
roughening a surface of the charge transfer layer using a plasma treatment; and
selectively thermally transferring a transfer element of a donor sheet to the surface
of the charge transfer layer after roughening the surface, the transfer element comprising at
least one light emitting layer.
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2. The method of claim 1, wherein the surface of the charge transfer layer is
not substantially chemically modified by the plasma treatment.
3. The method of claim 1, wherein the organic charge transfer layer is a
15 polymeric charge transfer layer.
4. The method of claim 1, wherein the polymeric charge transfer layer
comprises a homopolymer or copolymer of a polythiophene.
- 20 5. The method of claim 1, wherein the surface of the charge transfer layer is at
least partially oxidized, but not otherwise substantially chemically modified, by the plasma
treatment.
6. The method of claim 1, wherein roughening the surface comprises
25 roughening the surface using a plasma comprising a noble gas.
7. The method of claim 6, wherein the noble gas comprises argon.
8. The method of claim 1, wherein roughening the surface comprises
30 roughening the surface using a plasma comprising O₂.

9. The method of claim 1, wherein roughening the surface comprises roughening the surface using a plasma comprising N₂.

5 10. The method of claim 1, wherein roughening the surface comprises roughening the surface for a period of no more than 30 seconds.

11. The method of claim 1, wherein roughening the surface comprises roughening the surface with a plasma gas at a pressure of no more than 750 mTorr.

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12. A method of making an electroluminescent device, the method comprising:
forming an electrode on a receptor substrate
forming an organic charge transfer layer over the electrode;
roughening a surface of the charge transfer layer using a plasma treatment; and
15 selectively thermally transferring a transfer element of a donor sheet to the surface
of the charge transfer layer after roughening the surface, the transfer element comprising at
least one light emitting layer.

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13. The method of claim 12, wherein the electroluminescent device has no substantial degradation in brightness as compared to an electroluminescent device made in a same manner except no roughening of the surface using a plasma treatment.

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14. The method of claim 12, wherein the electroluminescent device has no substantial degradation in operating voltage as compared to an electroluminescent device made in a same manner except no roughening of the surface using a plasma treatment.

15. The method of claim 12, wherein the electroluminescent device has no substantial degradation in efficiency as compared to an electroluminescent device made in a same manner except no roughening of the surface using a plasma treatment.

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16. A method of transferring a transfer element of a donor sheet to a receptor,
the method comprising:

- forming an organic layer on a receptor substrate;
- roughening a surface of the organic layer using a plasma treatment; and
- 5 selectively thermally transferring a transfer element of a donor sheet to the surface
of the organic layer after roughening the surface, the transfer element comprising an
organic surface that contacts the organic layer of the receptor substrate.

17. A method of transferring a transfer element of a donor sheet to a receptor,
10 the method comprising:

- forming an organic layer on a receptor substrate;
- forming a transfer element on a donor sheet, wherein an exposed surface of the
transfer element is organic;
- roughening, using a plasma treatment, at least one of (i) a surface of the organic
15 layer and (ii) the exposed surface of the transfer element; and
- selectively thermally transferring the transfer element of the donor sheet to the
surface of the organic layer after roughening.

18. The method of claim 17, wherein the surface of the charge transfer layer is
20 not substantially chemically modified by the plasma treatment.

19. The method of claim 17, wherein the organic charge transfer layer is a
polymeric charge transfer layer.

20. The method of claim 17, wherein the surface of the charge transfer layer is
25 at least partially oxidized, but not otherwise substantially chemically modified, by the
plasma treatment.

21. The method of claim 17, wherein selectively thermally transferring the
30 transfer element to the substrate occurs without exposure to air after the roughening.

22. The method of claim 17, wherein the transfer element comprises an electrically active layer.

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